



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,144	10/26/2001	Michael J. Lehman	SP00-366	7098

22928 7590 10/01/2002

CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER

DERRINGTON, JAMES H

ART UNIT PAPER NUMBER

1731

DATE MAILED: 10/01/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,144

Applicant(s)

LEHMAN ET AL.

Examiner

James Derrington

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 14-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1731

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 406122527 and its Abstract taken alone or with Guerder et al (4,221,825).

JP 406122527 and its Abstract disclose the process of providing a bait rod 10 and depositing soot from at least two burners where a silica producing gas and a reactant flame is emitted from one burner (1 or 2) and a fluorine based gas is emitted from an auxiliary burner 15. The current wording of claim 1 "supplying a first jet of fluorine-based gases" is inclusive of the function and operation of the burner 15 of JP 406122527. However, the teachings of Guerder et al are also relied on where a fluorine-based gas can be supplied to a bait rod for doping of silica by means of a jet or nozzle 24 or 26 (See Col. 2, lines 60-67). It would have been obvious for one of ordinary skill in the art to have used a jet or nozzle in the process of JP 406122527 for supplying a fluorine-based gas since a jet or nozzle would be expected to perform in the art expected manner.

With regard to claim 2, JP406122527 shows the fluorine based gas directed at the bait rod. With regard to claim 7, Guerder et al disclose that fluorine based gas and the silica soot are combined prior to contacting the bait rod. One of ordinary skill in the art would have been able to alternatively use as claimed the two techniques shown by the cited references with the expectation that both would accomplish the desired result

Art Unit: 1731

of preparing a fluorine doped silica perform in view of the teachings these references.

With regard to claim 8, Guerder et al discloses that the fluorine-based dopant gas can be supplied from two nozzles (Col. 3, line 34 ff) and it would have been obvious to use multiple nozzles for fluorine-based gas in order to enhance the doping effect. With regard to SF₆ as recited in dependent claim 12, Guerder et al disclose this fluorine doping gas and it would have been obvious to use this particular gas with the process of JP 406122527 in view of its art recognized utility.

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 406122527 and its Abstract taken alone or with Guerder et al (4,221,825) as applied to claims 1-2 and 7-13 above, and further in view of Edahiro et al (4,402,720).

Edahiro et al (4,402,720) disclose et al alternative embodiments where burners and nozzles or jets can have an orthogonal orientation to the bait rod (Fig. 4) or have a non-orthogonal orientation to the bait rod (Fig. 5). One of ordinary skill in the art would be able to decide the appropriate orientation in view of these teachings.

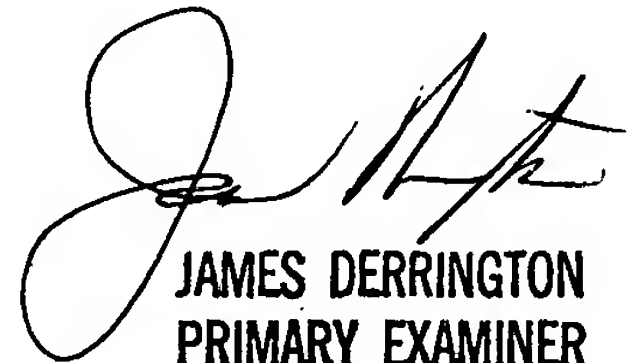
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Derrington whose telephone number is 703 308-3832. The examiner can normally be reached on 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-7718 for regular communications and 703 872-9311 for After Final communications.

Art Unit: 1731

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0661.

jd
September 28, 2002


JAMES DERRINGTON
PRIMARY EXAMINER
ART UNIT ~~137~~ 1731